

REMARKS/ARGUMENTS

Claims 1-18 and 23-33 were pending. Claims 1, 14, 23, and 25 have been amended.

In response to the Office Action mailed March 22, 2006, the Examiner's claim rejections have been considered. Applicants respectfully traverse all rejections regarding all pending claims and earnestly solicit allowance of these claims.

1. Claim Rejection 35 U.S.C. § 102(b)

Claims 25-27 are rejected under 35 U.S.C. § 102(e) as being anticipated by Joffe (U.S. Patent No. 6,330,584). Applicant respectfully disagrees. Joffe fails to teach, describe, or suggest a target program counter that determines a number of programs to interleave as claimed in amended claim 25. The Examiner contends that the Task Control Block 320 of Joffe anticipates the target program counter of claim 25. However, the Task Control Block 320 of Joffe does not determine programs to interleave. It only routes four tasks that have been provided to it. For this reason, Joffe does not anticipate the claimed invention.

2. Claim Rejections under 35 U.S.C. § 103(a)

Claims 1-7, 9-11, 14-17, 23, 24, and 33 are rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Joffe (U.S. Patent No. 6,330,584) in view of Krishna (U.S. Patent No. 6,161,173). Applicant respectfully disagrees.

With respect to claim 1, the combination suggested by the Examiner would still not teach, describe, or suggest the claimed invention. Even though Krishna describes a goal of achieving latency of one clock cycle, it admits this is not always possible. Since there is not teaching in Krishna of how to achieve this latency, it would not make it obvious to modify Joffe to achieve such latency. Applicant asks for specific teaching from Krishna on how to modify Joffe to result in the claimed invention. A mere suggestion or expression of desire for a result is not a teaching of that result. There must be specific language and structure that enables such a result. There is no such teaching or language in the cited combination.

Regarding claim 14, the Examiner correctly admits that Joffe does not teach that no no-ops are used to achieve the desired latency or to ensure that a first instruction is completed before beginning a second instruction. However, the Examiner mistakenly suggests that Krishna provides such a teaching. Applicant contends that there is no clear teaching in Krishna that no no-ops are used to ensure that a first instruction is executed before a second one is executed. Krishna does discuss the use of providing no-ops to the instructions set. However, the combination suggested by the Examiner still fails to teach, described, or suggest claim 14 as amended. Krishna teaches the use of a stop or hold command to prevent the execution of a second instruction before a first instruction is completed, and thus idles the processor during the hold. The present claimed invention does not idle the processors to ensure the correct order and timing of completion of instructions. The present claimed invention does not allow idling of the processors during operation.

With respect to claim 23, the amended claim also calls out that neither a no-op or idle is inserted into the pipeline. For the reasons noted above, the cited combination fails to teach, describe, or suggest, the claimed invention.

Regarding claim 33, Applicant disagrees with Examiner's contention that column 2, lines 35-39 of Joffe teach the claim elements of "checking to see if all of said plurality of programs are completed; checking to see if a second output register slot is available to assign to a second program from said plurality of programs when said first program is completed; checking to see if one or more instructions are available when at least one of said plurality of programs is not completed." There is no discussion in that section, or in any section of Joffe, of checking to see if all programs are completed. Instead, Joffe merely looks to see if all tasks sharing the resource have completed before permitting that task to get access again to the resource. By contrast, there would be no reaccessing the resource (register) in claim 33 because the claim calls out executing instructions of the first program until the program is completed. Similarly, there is not teaching in Joffe of checking to see if a second register slot is available to assign to a second program from a plurality of programs.

The Examiner has rejected claim 32 under 35 USC 103 as being unpatentable over Narayanaswami in view of Krishna. Applicant respectfully disagrees. The Examiner contends that the mere suggestion in Krishna of the advantage of achieving an average latency of one clock cycle (while admitting it is not always possible to do so) does not amount to the actual

teaching of how to achieve such desired latency. Without such teaching, the combination suggested by the Examiner still fails to teach, describe, or suggest the claimed invention.

With respect to all dependent claims, as a result of the above response, applicant contends that they are dependent on allowable base claims and are themselves allowable.

In addition, there are multiple instances where the Examiner states that a claim is “similar in scope” to another claim. Applicant does not agree that such claims have similar scope and respectfully requests that such characterizations be avoided if possible.

CONCLUSION

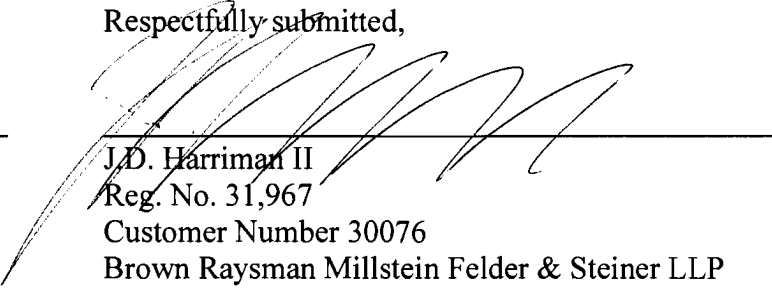
Applicants have made an earnest and *bona fide* effort to clarify the issues before the Examiner and to place this case in condition for allowance. Reconsideration and allowance of all of claims 1-18 and 23-33 is believed to be in order, and a timely Notice of Allowance to this effect is respectfully requested.

The Commissioner is hereby authorized to charge any additional required fees from Deposit Account No. 502811, Deposit Account Name BROWN RAYSMAN MILLSTEIN FELDER & STEINER LLP.

Should the Examiner have any questions concerning the foregoing, the Examiner is invited to telephone the undersigned attorney at (310) 712-8300. The undersigned attorney can normally be reached Monday through Friday from about 9:00 AM to 6:00 PM Pacific Time.

Respectfully submitted,

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